

February 10, 1995

Mr. J. Andrew Goddard
Chairman, Saad Site Executive Committee
Bass, Berry & Sims
2700 First American Center
Nashville, TN 37238

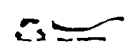
Subject: Saad Trousdale Drive Site

Dear Drew:

Based on our conversation, review of Fred Stroud's letter to you of January 21, 1995 and relevant site data, I have prepared the following to rebut the technical points presented by EPA to support a sixth removal action at this site. Mr. Stroud cited four basic points to support requesting yet another removal action in his January 21, 1995 letter. These are summarized below, with a response following in italics to each. Following these I have provided some background technical information to address EPA positions presented at our meeting of January 26, 1995 and to the court in the petition for access:

1. Mr. Stroud's point: The material is hazardous by characteristic (failed TCLP for the TCE) and is in contact with the groundwater.

Response: This first point suggests that somehow the disposal characterization data for materials excavated and removed for off-site disposal present a new finding relative to current groundwater conditions. The analytical testing performed (TCLP) is for disposal characterization and is not used for nature and extent determinations nor any associated risk evaluation. The test uses an aggressive leaching solution (acetic acid at pH of 4.93 or 2.86) to simulate leachate from municipal solid waste landfills. This test is not representative of risk, particularly with respect to conclusions that the site poses an imminent and substantial endangerment. Not all the TCLP results exhibited the disposal characteristic for TCE. Only those in the small area previously identified as containing the highest concentration detected at the Site of TCE at 3300 mg/kg were shown to be characteristically hazardous and these materials were removed. These data provide no new information. One would expect exceedance of the 0.5 mg/l TCLP standard for TCE starting with a bulk analysis concentration of 3300 mg/kg. It should also be noted that, at the OSC's direction, no analytical data were collected on the 1000 cubic yards of material removed by Alcoa. This material was just assumed to be characteristically hazardous for disposal. A review of past data indicates that this material likely was not characteristically hazardous. This data presented by EPA represents only a small subset of the available site data. To extrapolate to the entire site from disposal characterization data on material removed is technically unsound and inappropriate.



Mr. J. Andrew Goddard
February 10, 1995
Page 2 of 5

17 7 0544

2. Mr. Stroud's point: The material contains toluene, xylene, vinyl chloride as well as other hazardous substances.

Response: The presence of hazardous substances at this site has been known for well over a decade. Certainly, the presence of hazardous substances in and of itself does not warrant further removal, especially in light of the extreme time period of knowledge, the associated levels of the constituents, and the substantial response actions that have been performed to date. For example, the highest concentration of toluene detected at the site in the past 5 years (over 55 samples) was 5200 mg/kg, compared to an industrial Risk Based Concentration (RBC) for direct exposure (RBC-Region III) of 200,000 mg/kg and this area was removed. The highest concentration of xylene detected was 1000 mg/kg (compared to an RBC of 1,000,000 mg/kg), and this area was also removed.

In evaluating available site soils data for total volatile organic compounds (VOCs), the highest detected site concentration of 11,000 mg/kg was from an area of the site that was subsequently removed, as was the second highest, third highest, fourth highest and so on. In fact, the areas where 19 of the highest 20 concentrations were detected, were subsequently removed. The 21st highest total VOC concentration was 53 mg/kg.*

3. Mr. Stroud's point: The groundwater at the site is "potential drinking water" and requires protection.

Response: To my knowledge, no groundwater receptors have been identified. The groundwater at the site is not used for drinking water and it is unreasonable to assume that it will be. There are no data provided to demonstrate any possibility that this water at the site may be used as drinking water, or otherwise impact a receptor, in any reasonable time frame. The question then is, are the concerns to be addressed related to actual risk to human health or the environment, or to some future potential risk based on some hypothetical scenario. If the latter, then this type of risk reduction evaluation is properly performed and addressed in the remedial realm.

The new excavation pit water data produced by EPA and cited as reflective of groundwater, is inappropriate and is in no way representative of local groundwater conditions. The EPA would never allow us to use such data in such a manner.

*An organic compound generally less than 2% soluble and boiling point less than 200°C. Generally identified as organic compounds most mobile in a soil matrix and includes toluene, xylene, trichloroethene, among others.

Mr. J. Andrew Goddard
February 10, 1995
Page 3 of 5

17 7 0545

4. Mr. Stroud's point: The preliminary results of the EPA's dye trace substantiates previous studies indicating that the contaminated water from the Site is migrating and poses an imminent and substantial endangerment to human health and the environment.

Response: The dye trace study results are noted by Mr. Stroud as preliminary. We agree in principle; however, our review indicates significant technical concerns with the data, conclusions and the QA/QC procedures utilized. For example, the dewatering pumping being performed in the vicinity will have altered natural groundwater potentiometric surfaces. In one instance a positive trace was concluded based on a single detection. It is our opinion that, at this point, the preliminary dye trace results serve only to muddy the waters (so to speak) and to increase speculation.

Furthermore, if the dye trace preliminary results are correct and water from Saad is moving west onto CSX Radnor yards, then EPA's past (early and middle 1980's) groundwater data showing contaminants off-site in other directions present even more questions that should be addressed on a regional basis in a remedial program.

To use the conclusions of this status report, identified by Mr. Stroud as preliminary, as support for additional removal action for soils that could result in the expenditure of several million dollars, is misguided and technically inappropriate. EPA would seem to agree based on our understanding that EPA is now planning to undertake expansion of the study using different methods and dyes, and extension of the study for some undetermined time frame. In any case, even if the dye trace results from the site were correct, the migration of water from the Saad Site would be to the west onto the CSX Radnor Yards, a highly developed and large industrial facility with known subsurface and groundwater contamination, which is currently under a remediation program regulated by the State of Tennessee. Obviously, previous studies pointing to Croft Spring as the likely receptor are not substantiated because this is to the Southeast of the Site.

The complexity described above and the justification for a reasoned approach is clearly demonstrated by the progress of the dye trace study, which has been on-going for more than 6 months. It is our understanding that EPA is now planning to expand and extend this study for at least 6 months, if not longer. Solely the scope and duration of such an investigation dictates that it is more appropriately conducted in conjunction with a well planned remedial investigation.

It appears that the technical focus of EPA has changed from direct exposure to potential future use of groundwater. We have been diligently implementing work as requested and approved by EPA for five years under the removal authority. If groundwater conditions on-site and off-site were of such concern, we could have been collecting information throughout this period. However, at no point

GMA

17 7 0546

Mr. J. Andrew Goddard
February 10, 1995
Page 4 of 5

did EPA suggest this was of concern until after our five removal efforts had been completed. I strongly believe that additional removal actions serve only to delay the obvious progression of the work to evaluate and address groundwater as appropriate. To further illustrate this, I provide the following points:

- In the five removal actions conducted on this site, the following have been removed:
 - 144,700 pounds of characteristically hazardous waste for incineration;
 - dismantling of 4 above ground tanks and two sumps for scrap/recycling;
 - excavation of an underground oil water separator system and dismantling for scrap/recycling;
 - 152,800 gallons of non-hazardous liquid;
 - 72 drums of characteristically hazardous waste, including 29 drums removed from the subsurface;
 - 139 drums of non-hazardous waste;
 - 168 cubic yards of non-hazardous surface debris;
 - 1,750,000 pounds (approximately) of non-hazardous soil and debris; and
 - 4,850,000 pounds (approximately) of characteristically hazardous soil and debris (approximately 3,000,000 pounds of which was disposed without analytical data).
- Having been involved with the negotiations with EPA relative to the 1994 AOC, the activities that were implemented, based on my understanding, were to be the final action under the removal program, provided that nothing remarkable was discovered that was inconsistent with what was previously known about the site. These latest removal activities, including EPA's on-going dye trace study, have provided no new reliable data or information inconsistent with what was previously known about the site. To the contrary, the data and information collected are entirely consistent with what was previously known about the site.
- The surrounding area is heavily industrialized and contains a number of other actual or potential sources which are or may be contributing the same constituents to local groundwater contamination. The impact of the proposed Saad Site work relative to regional or area background contamination is unknown. Therefore, to be in conformance with standard RI/FS procedures, background issues should be addressed to ensure consistency of remedial response in the area for all potential source areas, not singling out the Saad Site unreasonably.
- The extensive excavations suggested by Mr. Stroud may result in an airborne pathway for contaminants via soil-to-air volatilization that could pose significant risks to

Mr. J. Andrew Goddard
February 10, 1995
Page 5 of 5

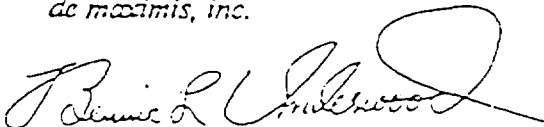
17 7 0547

workers at neighboring businesses. This type of potential exposure would be addressed in an RI/FS, specifically the FS.

- From an imminent and substantial endangerment standpoint, I would be more concerned about the physical dangers from casual trespass posed by the excavation at the site which remains open and full of water, especially if I were the property owner.
- I do not believe that Mr. Stroud's high estimate for potential costs of \$1.5MM accurately reflects the potential costs. Considering the difficulties in excavating, stockpiling, segregating, etc. and factoring in potential pretreatment requirements for disposal based on the December 19, 1994 land disposal restrictions, and the possibility of EPA excavating below 12 feet (approximately 20 to 22 feet to bedrock), the range of possible costs to implement this action is more likely \$1.5MM to \$5MM.

In summary, it is my opinion that a decision to pursue additional removal activities at this site and incur the premium expense under the pretense of a public health or environmental emergency is arbitrary and inconsistent with the facts and data currently available. It is time to allow this project to evolve to the next logical step in the normal progression of environmental work, that is to a calculated and less time-sensitive RI/FS that can address the complex and regional issues identified.

Sincerely,
de maximis, inc.



Bennie L. Underwood
Project Coordinator

BLU/jca